

# Social Identity, Collective Engagement and Communal Patent For Successful Digital Collaboration

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## ABSTRACT

This paper aims to develop a model of DCN (Digital Collaboration Network)'s sustainability based on social identity (social categorization, social identification and social comparison). Social identity takes a role as a glue for members of the community so that the sustainability of a community will be maintained. Furthermore, with a strong social identity, a DCN will produce a communal products and services. In order to protect product and service that has economic value and commercialized by members of the community, we need to endorse an intellectual rights property (communal patent). Collective engagement will also reinforce the sustainability of a collaborative network. This study will contribute to the efforts to maintain the sustainability digital collaboration by strengthening social identity and the creation of communal property. This study will use qualitative experimental design in which a framework will be designed to simulate and evaluate the implementation of social identity theory and the creation of communal property in the digital community.

**Keywords:** Social identity, collective engagement, communal patent, digital collaboration

## I INTRODUCTION

The advance of information and communication technology brings a necessity for doing business in the future. Business entities should join in the digital collaboration network to improve their performance. It will be a must for such business to join in the community in order to get the maximum benefit of collaboration through digital network (Fachrunnisa, 2014). With this network, digital community easily produces complementary products and services that are more profitable (Fachrunnisa, Mutamimah, & Gunawan., 2013b, 2013a).

However, there has been no convention or lack of research which discusses the intellectual property of the product or service as outcomes of digital collaboration. This is due to the differences in interests between developing and developed countries. Developing countries are used to living

in social communities are unfamiliar with the laws of intellectual property rights on the community. This study aims to maintain the strength and sustainability of the digital collaboration network (DCN) by strengthening social identity and the creation of communal property over the products and services resulting from the collaboration activities in DCN and collective engagement that occurs in the community. Social identity theory has been widely discussed in the real environment that is based on physical contact, however, a study to identify how the process of strengthening the social identity for digital community has not been widely discussed. With the business ecosystem, sustainability and excellence of an industry collaboration will be formed. This is because members of the ecosystem will be able to support each other 'life' and 'existence' of them.

This research aims to develop a model and a measurement scale implementation of social identity theory and collective engagement for DCN member. The study is based on secondary data which collected from books, journals, magazines and the internet. The conceptual framework is developed to describe each policies and practices of its dimensions.

## II LITERATURE REVIEW

### A. Social Identity

Social identity is a feeling or sense of a person based on their membership in a group. (Tajfel & Turner, 1986) proposed that the group (i.e, social class groups, families, business groups) is an important source of pride and individual self-esteem. Group or community gives a sense of social identity such as feelings of belonging in social groups, gives an understanding the collaborative work within the group, across many domains of science. Collaboration in a group has been studied to achieve business objectives, to support and to maintain community as well as to ensure the positive benefit of group's work. In this study, we will investigate the benefits of

collaboration from the perspective of collaborators, and contribute to the topic of research topics related to digital communities or virtual communities.

Identity is a tool to understand individual actions, thoughts and even individual feelings when joining a community. This study focuses on the interactional identity in a business community, which is an important aspect of the identity of the majority of members of the community. The study also aimed to show that the identity is very meaningful to the power of a digital community. In short, such identity needs psychological and goal-directed manual interaction.

In cognitive framework, identity is understood as cognitive tools that can be used in the activities system. Identity is also often seen as something through a process, or as a result of an activity. Socio-cultural perspective needed to capture how the mechanism of incorporating people with the tools, institutions and identity; as well as how to limit the action, expand, and how they work as a tool for individual identities in a virtual community.

## **B. Communal Patent**

ILO, a governing body of the UN has developed a concept called the CBED (Community Based Enterprise Development). CBED is the business development of a community-based enterprise. DCN as one of the digital business community meant to hold the perpetrators of business people to collaborate and set up a product or service featured by collaboration in the community. At the end, the product or service as a result of collaboration should have a patent, so it will improve product competitiveness in the world. Intellectual property has become one of the most important factors to improve the competitiveness of the nation. As the core of the intellectual property, patents serve as a basis for developing and operating intellectual property and build an innovation capacity.

The formation and development of educational pattern for patent in collaborative business community is very important. It can be used as one tool to maintain the sustainability of a digital community. Sustainability of a digital community has been widely discussed in the literature. One of the reasons why sustainability of this digital community is significance is because this community has a life cycle. The

existence of digital communities depends on the behavior of emerging and sustainable from its members (Buchotlz, 2005). This life cycle pattern follows the general pattern of life cycle phases, namely birth, expansion, leadership, updates and even to death (Moore, 2003). Therefore, a consistent effort is needed so that a virtual community can maintain its life cycle; if not, then this community will disappear. However, there is little research focuses on how digital communities can be sustained. In particular, there is no research that proposes and discusses metrics or measures to maintain virtual communities based on the strengthening of group identity and the creation of community-based patents.

The principle of social identity theory indicates that the results of the employee's behavior not only of self-identification and other categories, but also the content identity. Previous research shows that when organizational identification is high, individuals incorporate important aspects of the identity as organization's self-concept. Identify themselves with the organization can be interpreted as a member initiatives to take the nature and value of the group. After value and nature have incorporated into the self-concept, they have a major influence on the reference frame theory, objectives, exchange and other characteristics of inter-group exchange.

## **C. Collective Engagement**

Engagement is a behavior that indicates the degree to which people moved to merge with their work in an organization. Individuals engagement with the tasks and objectives of the group will create a positive effect on the level of innovation and creation (Zhang & Bartol, 2010). Collective engagement is more than the aggregate amount of the individual's involvement in the organization (Bakker et al., 2006). Involvement has two basic components. First, members of the group must be aligned on a common goal and, secondly, they must be committed to mutually support each other's efforts (Kusari, Cohen, Singh, & Marinova, 2005). When members of each group involved in goal achievement, hence, shared information, shared values and shared vision will reinforce a mutual value. In the end, when member has full engage and focus on group objectives, the relationship of mutual support and individual

effort will produce group's energy, enthusiasm and focus on achieving common goals.

Moreover, group leader must understand how to translate individual collective engagement to organizational engagement. (Kahn, 1990) defines engagement as a more comprehensive description of the investment in the attitude of affective, behavioral and cognitive energy a person in the workplace. Collective engagement is a construct of organizational levels and is an indicator of the presence of the motivational environment within the organization (motivational aspect). While individual engagement based on a person's engagement to the organization, so that at this level, evaluative aspects predominate (Klein, Conn, Smith, & Sorra, 2001)

Collective Organizational Engagement will benefit the organization in some way. First, when the group members interact with each other, then they will share the positive elements behavior such as affective, motivational and attributes that can improve performance attributes such as collective efficacy and the potential for high group. Second, each member will be mutually comparing their input and output in the organization. This is known as social comparison process. Each member will compete to customize their engagement the group. Third, leaders are able to increase the level to which members feel connected and identify their destination with organizational goals, which at a later stage will override his desire to achieve organizational goals are more valuable (Piccolo & Colquitt, 2006). Therefore, collective engagement increases organizational value through the improvement organizational performance.

### III CONCEPTUAL FRAMEWORK

We proposed a conceptual model derived from identity theory and engagement theory. Identity theory comes from their interactions with the symbiotic and individual identity. The pattern of

organizational strength and identity of self-identification will form group strength. Meanwhile, group norms derived from engagement theory which explains that individual engagement and organizational engagement is a strength of a group. Thus, social identity and collective engagement can be recommended as a determinant of group performance. A model of proposition for social identity and group involvement as capital networking and collaboration are presented in Figure 1.

Such group will have a meaning if it is able to contribute to the members and the surrounding environment. If members understand the characteristic of digital collaboration, vision and mission of the group, then one of determinant the group performance is having a capital to collaborate. A strong social identity and collective engagement that high would be the determinant of group performance. To seek engagement with members of the group, we have to see something meaningful from the investment of time, energy and mind when joining the organization.

Identity of digital social collaboration network is derived from a common vision: digitalization. Those identities are: digital worldview, digitalization of product and service and creator of digital goods and services that benefit the community and surrounding environment. While at the level of collective engagement, it can be categorized into spiritual engagement, emotional engagement, physical engagement and intellectual engagement. Communal patent performance can be measured from strong leadership, high integrity of the members of the group, deliverability to the user group's mission and vision and ability to sustain the group in the long term. The proposed conceptual is presented in Figure 2.

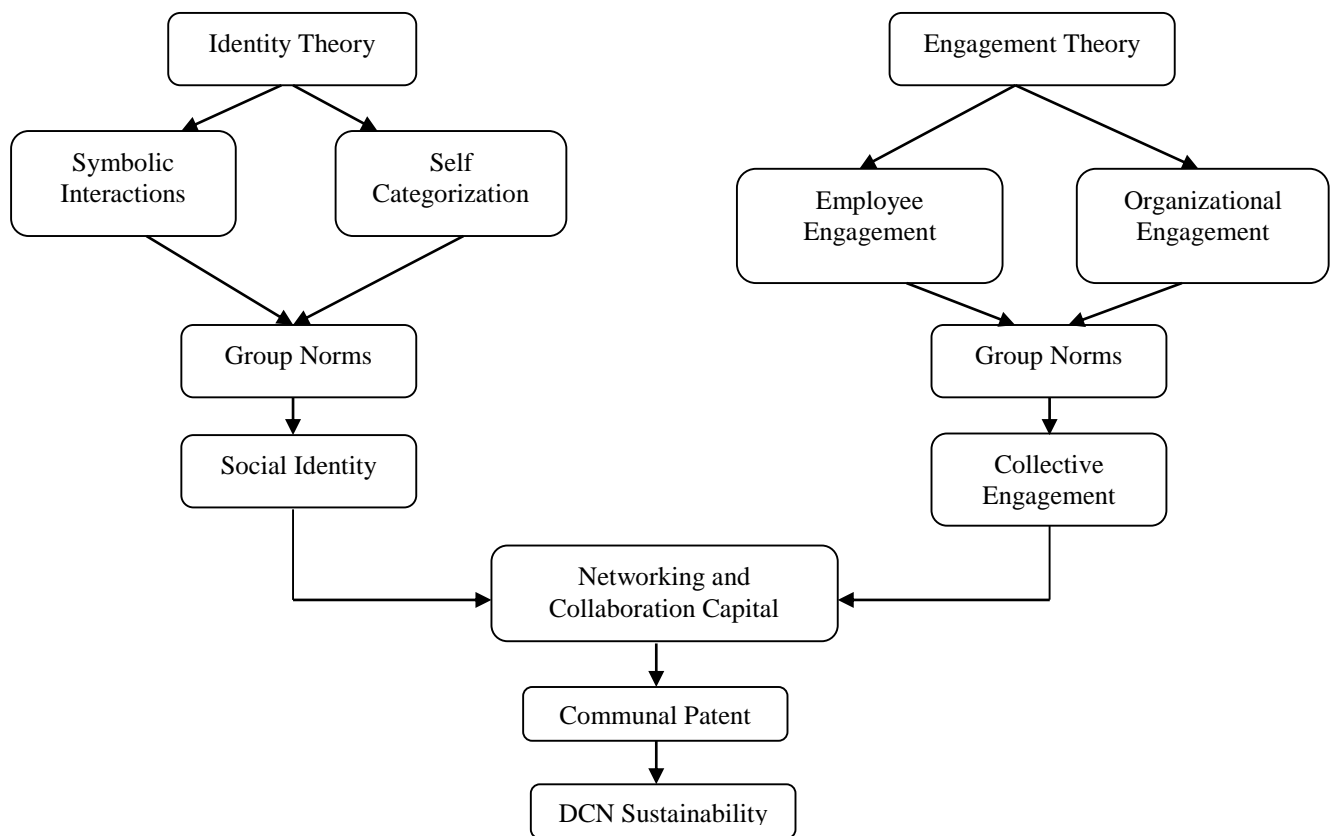


Figure 11. A Grand Theory of Social Identity and Engagement

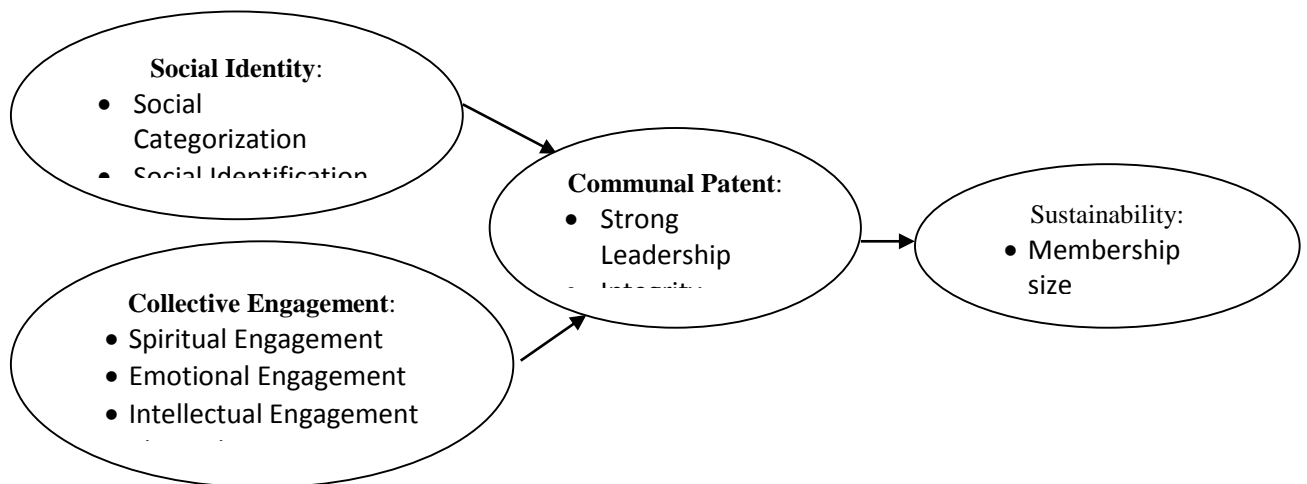


Figure 12. A Conceptual Model of Social Identity and Collective Engagement for DCN Sustainability

In this study the concept of social dimension, collective identity and engagement will affect the dimensions of sustainability through communal patent. Dimensions of social identity consists of; social categorization, social identification, and social comparison, while the dimensions collective engagement, consist of: spiritual engagement, emotional engagement, intellectual engagement, physical engagement which will affect communal Patent. Communal patent can be form of strong leadership, integrity, and delivery. This communal patent will affect community sustainability.

#### IV CONCLUSION

A digital collaborative group composed of members who have a common goal and are willing to cooperate in order to achieve community goals. When members agreed to link in a network, it would require several strategies to maintain the performance of the group or the network. Social identity and collective engagement are proposed as two organizational factors to create communal patent. Those two variables must be grown in order to improve network quality group. The social identity as a boundary spanning's provision to interact with external stakeholders. It is a special identifier that distinguishes the organization's existence with other organizations. Boundary spanning is an organization member that crosses boundaries as a branding for the organization or group of organizations.

The social identities of digital collaboration network are: digital worldview, digitalization of product and service, and good vision to build a digital product and service. In addition, collective engagement as a member attachment into their organization can be strengthened with spiritual engagement, emotional engagement, physical engagement and intellectual engagement. Those two organizational resources will take roles as a capital to form communal patent in collaboration networks. Managerial policy that can be

recommended to improve the quality of the network is to strengthen the social identity, giving a clear formulation of practical work program to construct communal patent.

A future research agenda includes validating and testing the propose model into quantitative or qualitative approach to make sure that the framework will contribute to the effort to maintain DCN's sustainability.

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